



From: usc!howland.reston.ans.net!spool.mu.edu!sol.ctr.columbia.edu!eff!ddsw1!  
gagme!precipice!jjw@network.UCSD.EDU  
Subject: Advice on Direct Digital Synth's  
To: info-hams@ucsd.edu

bwalzer@muug.mb.ca (Bruce Walzer) writes:

> In the Dec 92 and Jan 93 issues of 73 magazine there was an article about a  
> direct digital synthesizer based transmitter. It only had output to 20 MHz  
> or so, but it got me thinking. The Qualcomm Q2220 was described as cheap  
> (about \$50 US) but had only 24 bits in it's phase accumulator.  
>  
> I'd like to experiment with using a DDS as a reference to a PLL. To get good  
> tuning resolution at higher frequencies (I'm interested in something like  
> 500-1000 MHz) you need something like 32 bit resolution in your DDS.  
>  
> Does anyone know of any reasonably inexpensive 32 bit DDS's? I can get a  
> Qualcomm Q2334 dual 32 bit DDS for about \$100 CAN from a Canadian  
> distributor in singles. Is this a good way to go?  
>  
> Any thoughts would be appreciated.  
>  
>  
> -----  
> Bruce Walzer     |Voice: (204)783-4983  
> 1312 Valour Rd. |Internet: bwalzer@mona.muug.mb.ca  
> Winnipeg MB     |BBS: (204)783-3617 (Ariel II, 1200,8,N)  
> R3E 2W8         |AmRadio: VE4XOR  
> Canada           |  
>

Hi Bruce. Yes, the Q2220 only does 20MHz (officially. I've run  
it reliably to 22 (55MHz clock) as per the article), and the  
3-ish Hz step is a problem for what you intend.

Analog Devices has a new chip, AD9925, which does 32bit  
accumulator to 80-100MHz clock in, yielding outputs to over 30MHz  
in sub-hertz steps. Problem there is co\$t. The DDS chip is  
listed at \$29/qty 100 (and it's still not available), but the DAC  
to use it adds another \$30-60 US. Unless you really need wide  
range, why not use a PLL to generate a VHF/UHF signal and mix it  
with the Q2220? Same net affect, you have a VHF/UHF rig but at  
\*much\* lower cost.

BTW, if you do build the rig in the article, drop me a note. The  
amplifier as shown has an error on the board, and it really  
doesn't work as well as it should at higher frequencies. I can

let you know what I've changed in mine (it's better but still not real goot above 14MHz). I \*do\* feel qualified to criticise the design - I wrote the article ;-). As I said, digital likes me but analog and I are old enemies...

Are you going to Dayton this year? I'm supposed to give a spiel about the TW-1 and will include as much literature about new DDSs as I can get. Qualcomm also has a new DDS and some new DACs, but I have no info on it except the numbers. Will post more as I know more.

N9JZW John Welch -->jjw@precipice.chi.il.us

-----  
Date: Thu, 11 Mar 1993 17:15:10 GMT  
From: usc!howland.reston.ans.net!newsserver.jvnc.net!darwin.sura.net!sgiblab!sgigate!odin!chuck.dallas.sgi.com!adams@network.UCSD.EDU  
Subject: Dayton Rumor  
To: info-hams@ucsd.edu

Gang,

talked to buddy of mine in Chicago over the landline last nite.

rumor (and it's just a rumor at this point) has it that Ten Tec will announce a new rig at Dayton (probably along with everybody else) that will compete with the MFJ qrp rig. TT should be multiband rig. no idea about the price, but assume it will be close to the MFJ price.

anybody else heard this rumor? anybody want to enhance/squash this thing? anybody with the facts? look at dayton and let the net know.

my pocket book is open and ready..... ;-)

de k5fo chuck dit dit

p.s. the code contest is on for Hamcom in Arlington, TX in June. are you ready??????

-----  
Date: Thu, 11 Mar 1993 18:13:22 GMT  
From: news.cerf.net!proton!psi.illumc.edu!britton@network.UCSD.EDU  
Subject: F6FNU QSL manager  
To: info-hams@ucsd.edu

A recent thread concerned QSL manager F6FNU, who is used by many foreign

DX stations. Some netters reported problems getting cards back.

"DX World" in the April issue of Worldradio points out the following rules which F6FNU has established:

- 1) You must QSL within 6 months of the activity.
- 2) You must include a self-addressed envelope (SAE) and \$2 U.S.
- 3) No I.R.C.s or bureau cards will be accepted.

Also, the article says that the 1993 Callbook address for F6FNU is wrong. Use the following:

P.O. Box 14  
F-91291 Arpajon Cedex  
FRANCE

I have used F6FNU in the past and found him to be 100% reliable and fairly quick, as long as you follow his rules.

73 de Barrie, k0wwwg Riverside, California

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Date: Thu, 11 Mar 1993 18:48:00 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!sol.ctr.columbia.edu!  
jabba.ess.harris.com!mlb.semi.harris.com!SU19F!jhobson@network.UCSD.EDU  
Subject: Icom 737  
To: info-hams@ucsd.edu

In article <4514.120.uupcb@pcs.sj.ca.us> bill.nadzam@pcs.sj.ca.us (Bill Nadzam) writes:

>  
> Hello again Jeff, The new Icom 737 is a nice rig. HRO in  
> [deleted]  
> Then again if ICOM is your thing Find a clean IC-735 add the IRC  
> filters to it, the CW filters, and maybe the optional keyer  
> and you go a great rig in a small box. If you need the internal  
> Auto-Tuner then you'll have to keep looking.

I would recommend against getting the internal electronic keyer for the 735, unless not having an extra box to deal with is very important (maybe for mobile and/or remote operation). I have the 735 with the internal keyer. The speed adjustment is made by the MIC GAIN slider. The lower 80% of the movement of the slider gets you between ~5-15 WPM. The upper 20% covers ~15-40 WPM. It's very hard to adjust if you want to operate above 15-18 WPM.

Harv Hobson  
WB4NPL  
jhobson@su19f.ess.harris.com

-----  
Date: 11 Mar 93 14:21:19  
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!pyrite!grund@network.UCSD.EDU  
Subject: In Defense of HRO (Re: Ham Radio Outlet incident)  
To: info-hams@ucsd.edu

In article <1993Mar10.094833.1238@n5ial.mythical.com> jim@n5ial.mythical.com (Jim Graham) writes:

aren't they the store that sends out a whole catalog full of stuff,  
but not a single price anywhere in there? (can't say for sure, because  
if they are, their catalogs are all in the trash....)

I have a simple policy on that---if they don't tell you the price, they  
are probably trying to hide something (until you get to the counter),  
and I just don't bother. if they don't have prices on anything in the  
store, I'd never go to that store. I'll go to another store, or buy via  
mail order...either way, I'd buy from somewhere else.....

It is worth mentioning that I've had nothing but good experiences with  
HRO. In December, I bought an Alinco 580 HT from them. About a day  
after it arrived at my house, the transmitter portion of the radio  
stopped working. A simple 5 minute phone call to HRO was all it took  
for them to send USP back out to pickup the radio and send a new one  
in its place. All I did was box up the old radio and wait for the UPS  
guy. I didn't even pay return shipping, highly unusual for a mail  
order firm. The mailing delays drove me crazy, but this is par for  
the course with a mail order firm and especially understandable given  
that it was just before Christmas.

It is also worth mentioning that HRO had the lowest price I could find  
on the Alinco at the time.

I've never been to their outlet stores, but agree that it would be  
nice to see prices posted at their stores, where it would be less  
complicated to make posted price adjustments.

(I have no affiliation with HRO except as a satisfied customer.)

Victor  
--  
(ex-IBM, soon to be...)

Victor D. Grund (N8XEQ) | Clam Associates | grund@pyrite.som.cwru.edu  
Senior Consulting Engineer | 101 Main Street | CIS: 72440,1163  
AIX Specialist | Cambridge, MA | (216) 664-7381

-----  
Date: Thu, 11 Mar 1993 18:31:52 GMT  
From: usc!cs.utexas.edu!utnut!utcsri!newsflash.concordia.ca!  
hobbit.ireq.hydro.qc.ca!mac1.ireq.hydro.qc.ca!houlejm@network.UCSD.EDU  
Subject: Info on SG-230 Antenna tuner?  
To: info-hams@ucsd.edu

I have seen ads in "73" magazine from SGC INC on their SG-230 Automatic Antenna tuner.

It covers 1.8 to 30 MHz, 10 to 150 W PEP, with only 12 VDC and RF cables as interconnections thus working with any HF tranceiver.

Since I am going to install a HF radio in the boat this spring, I am looking for any information on this subject, more specifically hands on experience with this antenna tuner.

Thanks

--  
Jean-Marie Houle  
Institut de recherche d'Hydro-Quebec  
1800 Mtee Ste Julie  
Varennnes, Quebec  
Canada, J3X 1S1  
houlejm@ireq.hydro.qc.ca  
Tel (514) 652-8083  
Fax (514) 652-8435  
VE2AEY

-----  
Date: 11 Mar 1993 18:30:00 GMT  
From: ucsd.edu!brian@network.UCSD.EDU  
Subject: Just for fun . . . someone's screw up  
To: info-hams@ucsd.edu

spady@bcstec.ca.boeing.com (Robyn Spady) writes:  
>well over an hour, two men had their mike keyed on channel 16 and tied up all  
>use of that channel . . .

>I hope they are able to track these buffoons down! I would even like it  
>better if their wives could hear what they were saying about them ;-)

Sounds to me like you're more pissed off at what was being discussed than that the channel was jammed. Would you be so angry and righteous if all you'd heard was the vessel's engine noise for over an hour?

Seems to me the more appropriate thing to do is to get a regulation passed that requires a 5 minute maximum transmission length timer in the radio!

- Brian

-----  
Date: Thu, 11 Mar 1993 16:46:02 GMT  
From: csus.edu!netcom.com!jfh@decwrl.dec.com  
Subject: Kenwood TH78A vs. Alinco DJ580  
To: info-hams@ucsd.edu

I passed the no-code Tech license in January, so my license should be arriving any week now. I suppose I should have a radio when it gets here.

I want a dual-band 2m/440 handheld. A friend recently bought an ALinco DJ580 and likes it. I don't like its slow scan rate, and operating it is sometimes confusing, but it would do if there's nothing better in the same price range.

One alternative I'm considering is the Kenwood TH78A. It's about the same size, and only slightly more expensive. I haven't actually used one yet (I'll try that this weekend), but it sounds OK from the specs.

Any comments from people who have already compared the two, or who own a TH78A?

There are supposedly some mods which extend the receive and transmit ranges (cutting diode 4 or 5, I think) on the TH78A? Has anyone made those mods? Any disadvantages to them? Is it possible to extend the receive without extending the transmit? Will the store do it for me (I don't have a MARS or CAP permit)?

--

-----  
Jack Hamilton    jfh@netcom.com    P. O. Box 281107    SF, CA    94128-1107  
-----

Date: Thu, 11 Mar 1993 17:12:50 GMT  
From: world!sharon@uunet.uu.net  
Subject: KH5K -- active 'til when?  
To: info-hams@ucsd.edu

I post this on behalf of a DX-ing friend who was sent off on a business trip this week for awhile, and wants to make sure he has a crack at working

the KH5K expedition.

Can anyone tell me how long they're supposed to be active there???

My friend will come home this weekend and go back again if they're shutting down, say, next Monday or Tuesday.....

Thanks to anyone who can help.

73,

Sharon KC1YR

--

Sharon Machlis Gartenberg  
Framingham, MA USA  
e-mail: sharon@world.std.com

-----  
Date: 11 Mar 93 16:56:54 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Motorola Radios Are/Were Tough  
To: info-hams@ucsd.edu

Miles Abernathy <miles@emx.cc.utexas.edu> writes:

> The Motorola folks had the best sales technique, though. After telling the  
> customer how good their talkies and pagers were, they would rare back and  
> throw one (radio, not customer) down at the floor as hard as possible. It  
> always survived.

I've heard of this sales tactic also...it's said to work especially well on public-safety customers like police and fire departments, since this is about the way they tend to treat the radios sometimes.

One incident stands out in my mind regarding Motorola HT's: Last February, about half a block of Cookeville's old business district burned down one morning. One of the tactics used by the fire department was to use a 100' aerial ladder to deluge the fire with water from above. As it happened, one of the firefighters assigned to this task dropped his Motorola HT from the top of the ladder onto a concrete sidewalk below. The vertical drop was on the order of 90 feet.

Next morning, they started the normal round of radio checks, and what do I hear but "portable 401 to dispatch, radio check?" "You're 10-2 [receiving you well], portable 401." "10-4, this is the portable we dropped off the aerial yesterday. Just wanted to make sure it still worked." Turns out,



just as readers of this discussion will surmise, all that broke was the plastic case of the battery pack. :-) The radio itself was unscathed.

I've also seen a Motorola HT used as a hammer to open a stuck padlock--didn't seem to affect it a bit. (The radio, not the lock. The lock was beaten to scrap metal by the time it came open.)

'Course, for what Motorola charges, their gear \*ought\* to last forever...:-/

```
=====
Richard Hosker      : tttttttttt
rph0470@tntech.edu  :   t u t u  Tennessee Technological University
PO Box 6083 TTU     :   t u t u  Cookeville, TN
Cookeville, TN 38505 :   t uuuuu
=====
```

```
#include <disclaimer.h>
```

```
-----
Date: 11 Mar 1993 18:33:25 GMT
From: ucsd.edu!brian@network.UCSD.EDU
Subject: Motorola Radios Are/Were Tough
To: info-hams@ucsd.edu
```

The first Motorola trade show booth I ever encountered featured the salesdrone hammering nails into a board with an HT-200.

I've always been impressed with the ruggedness of Moto walkies.  
- Brian

```
-----
Date: Thu, 11 Mar 1993 17:23:49 GMT
From: swrinde!cs.utexas.edu!zaphod.mps.ohio-state.edu!howland.reston.ans.net!
gatech!taco!djbarnes@network.UCSD.EDU
Subject: Motorola Radios Are/Were Tough
To: info-hams@ucsd.edu
```

> Miles Abernathy <miles@emx.cc.utexas.edu> writes:

```
>
> > The Motorola folks had the best sales technique, though. After telling the
> > customer how good their talkies and pagers were, they would rare back and
> > throw one (radio, not customer) down at the floor as hard as possible. It
> > always survived.
```

On a similar note, Fluke had the same sales approach when they came out with their first "droppable" multimeters. When they came calling on a customer,

they would act as though they had tripped over their own feet and drop the meter at the customers feet leaving them dumbfounded that nothing was broken. One such salesman did this to my father, though, and the meter DID break (the lcd busted out of it). This was pretty funny since it was supposed to withstand a drop of five stories or so with no problems. IMO, this was just a fluke.... pardon the lame pun.....

```
*****
Donald Barnes      |           "You can think about it, but don't
djbarnes@eos.ncsu.edu |
Computer Engineering |
N.C. State University |           do it."--Smokey
*****
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Date: 11 Mar 93 12:47:18 -0500  
From: usc!howland.reston.ans.net!newsserver.jvnc.net!darwin.sura.net!  
guvax.acc.georgetown.edu!roakley@network.UCSD.EDU  
Subject: New Space in the Spectrum!  
To: info-hams@ucsd.edu

I thought readers of this group would be interested in the following,  
which I have extracted from the February 6 issue of CQ Weekly Reports:

A House telecommunications subcommittee on Feb. 4 approved a bill that would transfer government-held radio bands to private businesses, paving the way for a new era in advanced wireless communications.

The legislation has been stalled for two years amid debate over whether to auction off the new frequencies rather than give them away. But new Democratic willingness to consider auctions has boosted chances of enactment this year.

The measure (HR 707)...would direct the Commerce secretary to transfer up to 200 Megahertz of electromagnetic radio frequency to private industry and local governments....

The usable radio spectrum ranges from the lowest frequencies used by AM radio to the very highest used by satellites and microwave. Agencies of the federal government, ranging from the Pentagon to the Tennessee Valley Authority, control 40 percent of the usable spectrum.

Bob

\*\*\*\*\*

Robert L. Oakley (Bob)	PHONE:	(202) 662-9160
Georgetown Univ. Law Library	FAX:	(202) 662-9202
111 G Street, N.W.	BITNET:	ROAKLEY@GUVAX.BITNET
Washington, D.C. 20001	INTERNET:	ROAKLEY@GUVAX.GEORGETOWN.EDU
	ARS:	WK3C

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-----  
Date: Thu, 11 Mar 1993 14:53:22 GMT  
From: usc!sdd.hp.com!col.hp.com!fc.hp.com!jayk@network.UCSD.EDU  
Subject: source for spools of wire  
To: info-hams@ucsd.edu

Standard electric fence wire is not good wire to use for transmitting. I think if you use it for xmit you will find the SWR of the antenna varies wildly with different power levels. I agree with the earlier suggestion of using copperweld.

Electric fence wire works well for receiving (I have 4 beverages made out of it). I have a support every 150 feet or so and have a little sag in the wire.

73, Jay Kesterson K0GU                    jayk@fc.hp.com

-----  
Date: 11 Mar 93 17:02:10 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!olivea!sgigate!odin!  
chuck.dallas.sgi.com!adams@network.UCSD.EDU  
Subject: source for spools of wire  
To: info-hams@ucsd.edu

In article <14570689@hpnmdla.sr.hp.com>, alanb@hpnmdla.sr.hp.com (Alan Bloom) writes:

|> In rec.radio.amateur.misc, tonyp@convex.com (honey bunny) writes:  
|>  
|> >I need to get wire. Lots of wire. About 3,000' (holy rhombic, batman!)  
|> >Does anyone know of a place that will sell small lots to the public?  
|>  
|> >What is the best gauge to use - seeing as it will be spanning about  
|> >600' non-stop (between tie points)?  
|>  
|> >Is stranded or solid better?  
|>  
|> People generally use Copperweld (copper-plated steel) wire for such  
|> purposes. Number 10 should be plenty strong enough.

|>  
|> AL N1AL

i have, and i'm sure other people on the net have, code (programs, not morse :-)) that will compute the sag, tension at the end points, etc. for a wire supported at the ends (with and without intermediate support points). i haven't used the code in 20 years, it uses finite element modeling to generate the sag, etc. in a wire of arbitrary length and given density.

it's the old clothes line problem. if a wire is supported by poles at each end, how much force will the wire exert on each pole? for no sag the tension is infinite. how much sag will permit reasonable tension and reasonable sag..... you wouldn't want to put a wire up 10 meters and have it sag 8 meters. it makes mowing the back yard difficult and dangerous and probably doesn't give good results in use.

someone else mentioned copper-weld. that's what i use for my 80 meter long wire up 10 meters. it has survived over a year in high winds in excess of 70 MPH, but we may see how it does this weekend with ice. ;-)

the sag is about 1 meter.

someone give me the density for various sizes. please.

73 de k5fo chuck dit dit

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Date: Thu, 11 Mar 1993 18:40:10 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!uwm.edu!cs.utexas.edu!convex!usernet@network.UCSD.EDU  
Subject: source for spools of wire  
To: info-hams@ucsd.edu

I'd like to thank everyone for their 2-cents worth.

I forgot to consider the sag.

I will be hanging it from oak trees, at about the 45 foot level.

San Diego doesn't get ice/snow, so that's fine but we do get the Santa Ana's kicking up.

I checked with a local supply place, and they have 5,000' spools on hand, and will cut the wire to any length I care. The price is \$107 per 1,000 feet. I guess that's a pretty good price for an antenna system. :-)

73,  
WA2EAA

--

Tony J. Podrasky                      Why does your dog keep staring and growling at me?  
San Diego , Ca                      Because he thinks you're stealing his food from  
him.  
tonyp@convex.com                      Why would he think that?  
QSL? QRU? QRZ? QLZ? QFA?              Well, you \*are\* eating out of his dish...

-----  
Date: 11 Mar 93 18:05:57 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!hri.com!noc.near.net!  
squam.banyan.com!banyan.com!dts@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <C3nMHR.8AL@feenix.metronet.com>, <randall.731804712@seashore>,  
<1993Mar11.154818.28480@isc-br.isc-br.com>m  
Subject : Re: Preparing for General Class Exam

The question pool you have is still current and is not expected to be updated  
until 1994, I believe.

-----  
Daniel Senie                      Internet:        dts@banyan.com  
Banyan Systems, Inc.              Compuserve:    74176,1347  
508-898-1188                      Packet Radio: N1JEB@WA1PHY.MA

-----  
Date: 11 Mar 93 17:12:10 GMT  
From: olivea!inews.Intel.COM!cad636!dbraun@decwrl.dec.com  
To: info-hams@ucsd.edu

References <C3nMHR.8AL@feenix.metronet.com>, <randall.731804712@seashore>,  
<1993Mar11.154818.28480@isc-br.isc-br.com>  
Reply-To : dbraun@scdt.intel.com  
Subject : Re: Preparing for General Class Exam

In article <1993Mar11.154818.28480@isc-br.isc-br.com>, bruceo@loki.isc-br.com  
(Bruce Oscarson) writes:

|>  
|> I am also looking for comments/recommendations on  
|> keys that might be a good choice for someone  
|> just getting into CW.  
|>

|> Thanks, DE N7RW0  
|> --

I found a copy of Super Morse for the PC (thanks people), and  
I highly recommend this program! I doubt you would need anything  
else (like tapes) to prepare for the code test.

Actually, does anyone have some sample exam text files that I  
could play back through Super Morse?

--

Doug Braun

Intel Design Technology  
408 765-4279

dbraun@scdt.intel.com

```
                / decwrl \  
                | hplabs |  
or maybe:      -| oliveb |- !intelca!mipos3!cadev6!dbraun  
                | amd    |  
                \ qantel /
```

"There is no human problem which could not be solved if  
people would simply do as I advise." -- Gore Vidal

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End of Info-Hams Digest V93 #305

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